

BUTTERFLIES IN EASTERN SWITZERLAND 1980,  
WITH A NOTE ON *EREBIA PLUTO* DE PRUNN.

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In mid-August 1980 Dr. T. W. Tolman and I, accompanied by my two older sons, spent several days at Pontresina in the Engadine. The weather was unremittingly wet as we travelled through France but, apart from one unsettled day, we had beautiful weather for the duration of our stay in Switzerland.

In spite of the late date in the Alpine butterfly season, we saw a good variety of species, including many that we had met with there over a month earlier the previous year.

The two *Erebias*, *melampus* Fuessl. and *tyndarus* Esp. for example, were swarming in the pastures of the Val Roseg on August 17th and many were in excellent condition. Flying with them were *Coenonympha gardetta* de Prunn. and the fritillaries *Fabriciana niobe* L., *Argynnis aglaia* L., *Brenthis pales* D. & S., *B. napaea* Hoffmannsegg, and *Clossiana titania* Esp. I observed a female *titania* ovipositing on the dry moss at the base of a drystone wall where *Viola ssp.* grew among the crevices. *Aricia nicias* Meig. was locally common at the foot of one stony slope and we saw many *Colias phicomone* Esp. and *Cyaniris semiargus* Rott. — all of these being butterflies we had encountered in early July 1979. Other species seen included a few *Polyamnatus eros* Ochs. and *Erebia montana* de Prunn. (usually at the edge of the screes) and excellent numbers of *Heodes virgaureae* L. of a small bright form which frequented the woodland clearings.

In one such clearing, in 1979, we had found *Euphydryas intermedia* Menetries and I was very keen to look for the early stages of this local species. To my surprise and delight I found a batch of very young *Euphydryas* larvae on a small web at the tip of a *Lonicera* leaf on one of the first bushes investigated. After this early success no more were found in spite of intense search by my sons who were spurred on by promises of generous rewards. Approaching the Roseg Hotel near the head of the valley *Parnassius phoebus* F. became quite common, favouring especially the rocky ground beside the river.

This beautiful butterfly was also conspicuous on the higher slopes of the Albula Pass which we visited on three occasions — the 18th, 20th and 21st August. The 20th was the day of rather uncertain weather and we were forced to descend to the meadows around Preda to escape the cold misty rain at the top of the pass. Here *Erebia pronoe* Esp. was found and a few *Erebia manto* D. & S. (not the high altitude f. *pyrrhula* but similar to the type) as well as *Palaechrysophanus hippothoe* L. *C. titania* and a single fresh *Mellicta athalia* Rott.

The other two days were brilliantly sunny and we spent most of our time at around 6000ft a little way down the north side of the pass. *Colias palaeno* L. was flying swiftly over the *Vaccinium-*

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covered slopes and a few of those netted were surprisingly still in fresh condition. A pair of *Vacciniina optilete* Knoch was also noted. On a patch of alluvial mud we encountered a swarm of the little alpine blues *Agriades glandon* de Prunn. and *P. eros* and we were able to select a small series of each of these species. These mud visitors were almost exclusively male however, and we had to work hard to find the females on the nearby grass slopes. The dark, violet-suffused females of *B. napaea* were also frequent in this riparian habitat. Still higher up on the scree slopes a few *E. pronoe* and one or two *Erebia gorge* Huebner flew with worn but very active *Pontia callidice* Huebner, but the prize was the large sooty *Erebia pluto* de Prunn. We risked multiple fractures pursuing these magnificent butterflies over the unstable grey stones. *Pluto* had the habit of inconsequentially skipping down as if to investigate the waiting net only to veer off suddenly when just beyond range. Then the stones would clatter and ring under foot as the unequal chase began! One female however settled a few feet in front of me on the scree and curving her abdomen she deposited an *ovum* on the underside of a small rock. I marked this and then searched carefully all around but the nearest living blade of grass I could detect was at least ten feet away. Occasionally *pluto* would approach the grassy areas at the edge of the rock slides but as soon as the insect found itself away from the scree it would show signs of alarm and a much faster flight pattern would be maintained until it found itself once more over the bare stones.

I have noticed a very similar habit among the males of *Erebia lefebvrei* Boisd. on the screes of the Sierra del Cadi in Spain. This *Erebia* occupies the same ecological niche in the Pyrenees and adjacent Sierras of northern Spain as does *pluto* in the Alps. Both butterflies are intensely dark and therefore perhaps share the facility of quickly absorbing heat reflected from the pale rock surfaces of scree. Rapid transfer of energy in this way may be essential to efficient flight at the high, relatively cool altitudes that both species frequent.

LEPIDOPTERA AT CANNA IN 1982. — The arrivals of the migrants here has been as follows: *Cynthia cardui* L., first seen on 9th June; a number of larvae found later, *Vanessa atalanta* L., first seen 11th June; others seen later, and larvae found; now frequent around buddleia in the garden. *Autographa gamma* L., first seen 9th June, others later; a pupa found on a thistle. *Nomophila noctuella* D. & S., in trap on 29th July.

All the resident butterflies have flourished in the hottest and driest summer I can remember here; this particularly applies to *Pieris napi* L., *Argynnis aglaja* L., *Boloria selene* D. & S., *Pararge aegeria* L. and *Hipparchia semele* L. On the other hand, moths have been less numerous, and trap catches disappointing. The only interesting capture has been a specimen of *Deilephila elpenor* L. on 25th June. Recently there has been an outbreak of *Cerapteryx graminis* L., and visitors repeatedly report seeing *Abraxas grossulariata* L. which has been common this year. — J. L. CAMPBELL, Farm Office, Isle of Canna, Hebrides.